

d.) Remarks

Sequence Requirements

"Sequence Listing(s)" are provided for the nucleotide and/or amino acid sequence(s) in this application. Each "Sequence Listing" is assigned a separate identifier as required in 37 C.F.R. § 1.821(c) and 37 C.F.R. §§ 1.822 and 1.823.

Amendments have been made herein to the Specification, wherein reference is made to the sequences by use of the assigned identifiers, as required in 37 C.F.R. § 1.821(d).

A copy of each "Sequence Listing" submitted for this application in computer readable form, in accordance with the requirements of 37 C.F.R. §§ 1.821(e) and 1.824.

The undersigned attorney for Applicant hereby states, as required in 37 C.F.R. § 1.821(g), that:

Each computer readable form submitted in this application is the same as the "Sequence Listing" to which it is indicated to relate.

All papers accompanying this submission introduce no new matter.

Use of Trademarks

The Specification has been amended to capitalize all mentioned trademarks. Generic terminology identifying the particular goods was provided in the original description.

Claim Rejections

Original claims 1, 3-5, 7 and 8 were rejected under 35 USC 112, first paragraph, as the specification was asserted not to enable the claimed subunit vaccines. The rejection is mooted by

virtue of the cancellation of the subject claims and the presentation of new claims 9-20 which do not include subunit elements.

Original claims 1-3 and 5-7 were rejected under 35 USC 102(b) as being anticipated by various prior art references. The rejection is mooted by virtue of the cancellation of the subject claims. New claims 9-20 are directed to the non-rejected subject matter contained in the original claims, namely, the subject matter of original claims 4 and 8 (minus subunits) directed to vaccines comprising recombinant MSP1a surface protein antigen in combination with an immunogen derived from *A. marginale* and related methods. The newly presented claims are thus believed to be in condition for allowance, which is respectfully requested.

Original claims 1-8 have been cancelled without prejudice to the re-presentation of the originally claimed subject matter in a continuing application. Cancellation of the claims should not be construed as an admission by Applicant of the unpatentability of any such subject matter.

Supplemental IDS

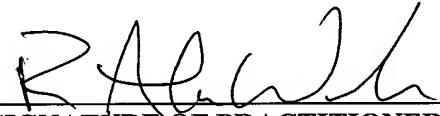
In accordance with 37 C.F.R. 1.97, Applicant hereby makes of record an additional document, cited in a recently issued PCT International Search Report on Applicant's corresponding international application. A PTO Form SB/08 and a full copy of the document accompany this statement, along with a copy of the search report itself. The document, an article entitled *Biased Immunoglobulin G1 Isotope Responses Induced in Cattle with DNA Expressing msp1a of Anaplasma marginale*, merely discloses a DNA vaccine containing a gene encoding msp1a. While being cumulative to the existing art of record, it is submitted for purposes of completeness. The other reference cited in the search report is already of record. Neither reference teaches or suggests the instantly claimed subject matter.

To the extent any additional fee under 37 CFR 1.17(p) is due by the submission of this Supplemental IDS, please charge the same to Deposit Account No. 06-0540.

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This paper is intended to constitute a complete response to the outstanding Office Action. Please contact the undersigned if it appears that a portion of this response is missing or if there remain any additional matters to resolve. If the Examiner feels that processing of the application can be expedited in any respect by a personal conference, please consider this an invitation to contact the undersigned by phone.

Respectfully submitted,


SIGNATURE OF PRACTITIONER

8/11/03
DATE

Reg. No.: 36,050

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